Attorney's Docket No.: 4255A/Z-03662D

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Robert White et al.
Serial No. : 10/692,136
Filed : October 23, 2003
Title : SAFETY RAZOR

Art Unit : 3724
Examiner : Isaac N. Hamilton
Conf. No. : 9171

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL

SUPPLEMENTAL APPEAL BRIEF

Appellant is appealing the final rejection of claims 17-24 and 26 in the office action dated October 11, 2006. Appellant requests that the rejection be reversed. A notice of appeal was filed on January 10, 2007.

Appellant submits this brief, with corrections made to the status of the claims in Section III in response to the Notice of Non-Compliant Appeal Brief, as supplemental to the Appeal Brief filed on January, 13, 2006. In the Examiner's answer dated March 28, 2006, the Examiner, for the first time, advanced a new motivation to combine the cited references. Appellant then submitted a Reply Brief, filed on May 30, 2006, with a declaration of Uwe Sievers rebutting the Examiner's new motivation to combine the cited references. The Examiner, however, declined to consider the Reply Brief because it included "a new or non-admitted affidavit or other evidence" in the communication dated June 16, 2006. Appellant, wishing to have the declaration of Uwe Sievers considered, filed a Request for Continued Examination on July 11, 2006. The Examiner then issued a non-final rejection of all of the pending claims in the office action dated October 11, 2006. Applicant maintains that the pending claims are patentable and wishes to proceed directly to appeal.

04/16/2007 RMEBRAHT 00000036 071350 10692136
01 FC:1402 500.00 DA

either reference that etching may be used to form a blade for wet shaving, having a sharp cutting edge at the surface plane. As discussed above, the processes described by Marcus produce edges that are perpendicular to or parallel to (and below) the surface plane.

Conclusion

Thus, for the above reasons, the 35 U.S.C. § 103(a) rejection of claim 17 based on the combination of Trotta and Marcus should be reversed. The 35 U.S.C. § 103(a) rejections of the remaining claims over Trotta in view of Marcus should be reversed for the same reasons.

The Commissioner is authorized to apply the appeal brief fee of $500, and any other charges or credits to Deposit Account No. 07-1350.

Respectfully submitted,

THE GILLETTE COMPANY

Joanne Pappas
Reg. No. 40,117

Date: April 13, 2007
Customer No. 27752

TO: **Mail Stop Appeal Brief – Patents - United States Patent and Trademark Office**

Fax No. 571-273-8300 Phone No.

FROM: Deborah A. Vaudo (Typed or printed name of person signing Certificate)

Fax No. 617-421-7839 Phone No. 617-421-7753

Application No.: 10/692,136

Inventor(s): Robert White et al

Filed: October 23, 2003

Docket No.: 4255A/Z-03662D

Confirmation No.: 9171

FACSIMILE TRANSMITTAL SHEET AND

CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office on April 13, 2007, to the above-identified facsimile number.

Deborah A. Vaudo (Signature)

Listed below are the item(s) being submitted with this Certificate of Transmission:**

1) Supplemental Appeal Brief – 19 pages

Number of Pages Including this Page: 20

Comments:

**Note: Each paper must have its own certificate of transmission, OR this certificate must identify each submitted paper.

(FAX-USPTO.doc Revised 11/18/2005)

(I) Real Party in Interest

The real party in interest is The Gillette Company, Prudential Tower Building, Boston, Massachusetts. The Gillette Company recently was acquired by The Procter & Gamble Company.

(II) Related Appeals and Interferences

There are no related appeals or interferences.

(III) Status of Claims

Claims 1-16 and 25 have been cancelled. Claims 17-24 and 26 are pending. Claims 17, 18, 20-22, 24 and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Trotta, U.S. Patent No. 5,018,274 ("Trotta"), in view of Erdmann, DE 3526951 A1 ("Erdmann"). Claims 19 and 23 stand rejected as unpatentable over these references further combined with "applicant's admitted prior art" ("APA"). APA consists of the text found at p. 3, line 30 – p. 4, line 23 of Appellant's specification.

Claims 17-24 and 26 further stand rejected under 35 U.S.C. §103(a) as being unpatentable over Trotta in view of Marcus et al., U.S. Patent No. 5,842,387 ("Marcus").

(IV) Status of Amendments

All amendments have been entered.

(V) Summary of Claimed Subject Matter

The claims relate to making cutting elements for safety razor blade units, i.e., for razors used for wet shaving (specification, page 1, lines 2-4). For example, claimed processes may be used to form the cutting elements illustrated in Figs. 2-3 in the application, reproduced below:

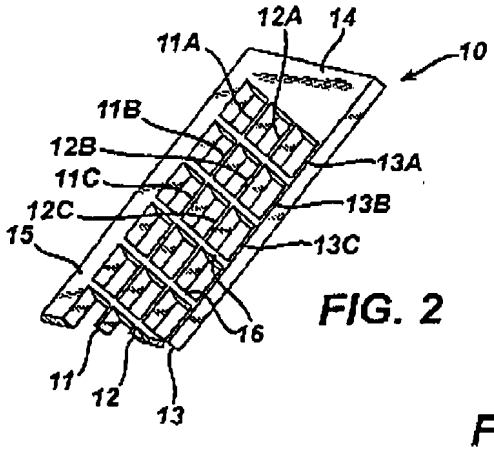
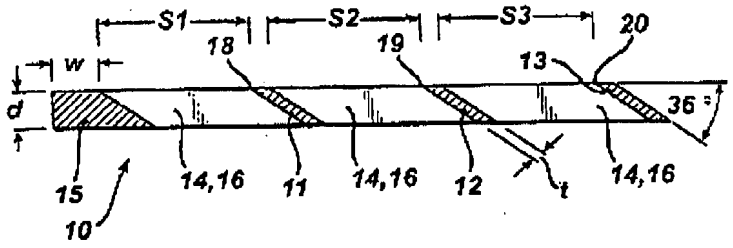


FIG. 2

FIG. 3



Referring to Fig. 2, cutting element 10 includes blades 11, 12 and 13 and guard element 15 (specification, page 7, lines 1-5). Referring to Fig. 3, blades 11, 12, 13 have sharp cutting edges 18, 19 and 20 at their upper forwardmost extremities (i.e., at the planar surface of the cutting element 10) (specification, page 7, lines 15-19). Intermediate elements 16 interconnect the blades and guard element (specification, page 7, lines 1-17).

Claim 17 is the only independent claim. Claim 17 generally relates to a method of making a cutting element for a safety razor blade unit including (a) providing a wafer of single crystal material having a surface lying in a predetermined plane of the crystallographic structure, (b) selectively removing crystal material at the surface by employing an etching process to form a planar cutting element inclined at an acute angle to the surface plane, and (c) forming a guard element from the wafer of single crystal material by the etching process, the guard element being integrally connected to the cutting element by interconnecting elements. The cutting element has a sharp cutting edge substantially at the surface plane, and the guard element is disposed substantially parallel to the cutting edge and spaced forwardly from the edge (figure 3). The

single crystal material may be, for example, single crystal silicon (specification, page 3, lines 19-21). An etching process involves removal of material by non-mechanical methods, such as application of chemicals, plasma or reactive ions (specification, page 3, lines 26-32).

The claimed method allows dimensional parameters of the shaving geometry in the final razor blade to be accurately determined at the time of manufacturing (specification, page 7, lines 17-18). This represents a potential major breakthrough in razor blade unit manufacture. Because the method utilizes a wafer of single crystal material, integrated circuit manufacturing techniques can be used to form, *in situ* with the blade unit, electronic components such as sensors and/or actuators (specification, page 5, lines 21-28).

Independent claim 17 has been copied below to include references to the specification and/or drawings for each claim element:

> 17. A method of making a cutting element for a safety razor blade unit (see e.g., specification, page 7, lines 1-5; Fig. 2) comprising the steps of providing a wafer of single crystal material having a surface lying in a predetermined plane of the crystallographic structure (see e.g., specification, page 4, lines 25-26), selectively removing crystal material at the surface by employing an etching process to form a planar cutting element inclined at an acute angle to the surface plane and having a sharp cutting edge substantially at the surface plane (see e.g., specification, page 4, lines 27-29), and forming a guard element from the wafer of single crystal material by the etching process (see e.g., specification, page 6, line 30 – page 7, line 7 and page 7, lines 25-27) said guard element being disposed substantially parallel to the cutting edge and spaced forwardly therefrom (see e.g., figures 2-7) and being integrally connected to the cutting element by interconnecting elements (see e.g., figures 2 and 5-7).

(VI) Grounds of Rejection to be Reviewed on Appeal

Claims 17, 18, 20-22, 24 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Trotta in view of Erdmann. Claims 19 and 23 were rejected as unpatentable over these references further combined with APA. Claims 17-24 and 26 were also rejected under

35 U.S.C. §103(a) as being unpatentable over Trotta in view of Marcus. Appellant requests reversal of all 35 U.S.C. § 103(a) rejections.

(VII) Argument

Appellant first will discuss Trotta and Erdmann, and then will explain why the rejection of the claims over Trotta in view of Erdmann should be reversed. Appellant will next discuss Marcus, and then will explain why the rejection of the claims over Trotta in view of Marcus should be reversed.

A. Claims 17, 18, 20-22, 24 and 26 are not obvious under 35 U.S.C. § 103(a) over Trotta in view of Erdmann

Trotta describes a method of making a blade that includes extruding a honeycomb-shaped uncured ceramic block and then slicing the block at an angle A to create the general blade shape, as shown in Figs. 2 and 4 below:

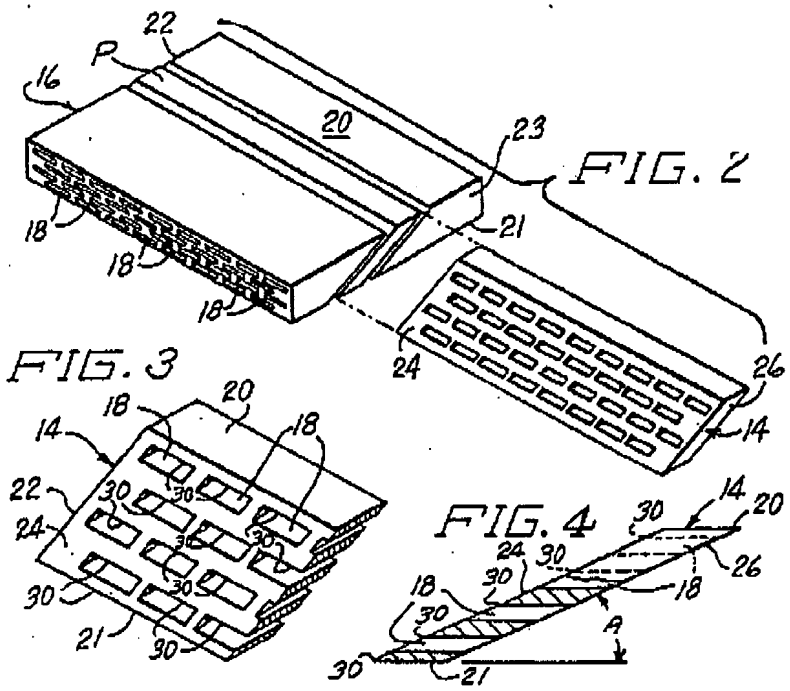


FIG. 2

FIG. 3

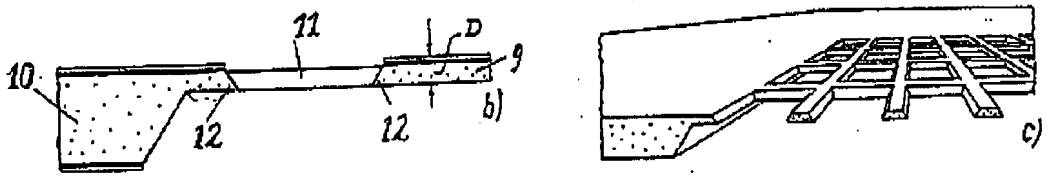
FIG. 4

The sliced block is then cured and the surface of the cured ceramic is ground and polished to form sharpened cutting edges 30.

Trotta does not teach or suggest several features of Appellant's claim 17. As the Examiner acknowledges, Trotta does not teach or suggest selectively removing crystal material at the surface by employing an etching process. The Examiner also acknowledges that there is no suggestion in Trotta of providing a wafer of single crystal material having a surface lying in a predetermined plane of the crystallographic structure.

Trotta does not explicitly disclose a guard element. The Examiner asserts that lower surface 21 constitutes a guard element. While Applicants do not concede that this interpretation is proper, nonetheless this alleged "guard element" is not formed by an etching process, as claimed by Appellant.

Erdmann, which the Examiner relies upon to remedy these deficiencies of Trotta, discloses "shearing blades" which are intended for use in electric ("electronic") shavers. These shearing blades are formed from a single crystal silicon wafer by an anisotropic etching process. As Erdmann explains, shearing blades (often referred to in the art as "foils") have holes 11 through which hairs extend during shaving. The hairs are cut, not by movement of the blade itself, but by the interaction of the lower, cutting surface of the blade with electrically-driven shearing knives. This type of cutting is described, for example, in U.S. Patent No. 6,826,835, as well as many other patents describing electric shavers. As a result, referring to Figs. 1b) and 1c) of Erdmann, reproduced below, the cutting edges 12 of Erdmann's blades are not positioned at the surface plane (the top surface in figure 1b) of Erdmann's blade. Instead, cutting edges 12 are recessed from the surface, at the bottom of each hole 11. Because Erdmann's blades function very differently from blades for wet shaving, there is no reason to include a sharp edge at the surface plane.



Claim 17 will be treated as representative of the claims on appeal. The rejection of claim 17 under 35 U.S.C. § 103(a) based on the combination of Trotta and Erdmann should be reversed. The rejection is a classic improper hindsight reconstruction of the claimed invention from the prior art.

35 U.S.C. § 103(a) provides in relevant part:

> (a) A patent may not be obtained... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

In order to find a claim obvious under 35 U.S.C. § 103(a), there must be a suggestion in the prior art to combine or modify the prior art to obtain the subject matter covered by the claim. See, for example, in In re Oetiker, 977 F.2d 1443, 1447 (Fed. Cir. 1992), in which the Court stated:

> There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination.

The Federal Circuit has cautioned repeatedly that the suggestion or motivation required for obviousness cannot derive from a hindsight reconstruction of the claimed invention that uses the claim as a roadmap for establishing obviousness. For example, in In re Fritch, 972 F.2d 1260, 1266 (Fed. Cir. 1992), the Court cautioned:

> [I]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious....

Similarly, in W.L. Gore and Associates v. Garlock, Inc., 721 F.2d 1540, 1553 (Fed. Cir. 1983) the Court explained:

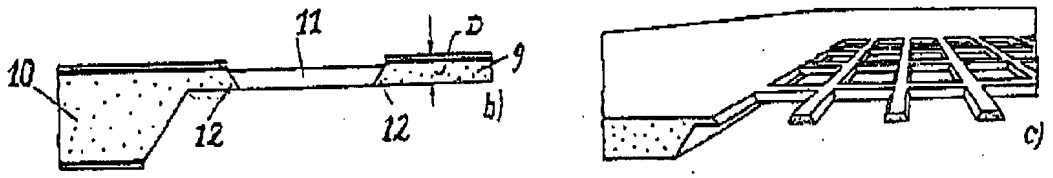
> To imbue one of ordinary skill in the art with knowledge of the invention when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

Neither Trotta nor Erdmann, alone or in combination, would motivate a person of ordinary skill in the art to replace the process described by Trotta with the etching process taught by Erdmann. The Examiner asserts that the artisan would have been motivated to make this modification "to reduce the number of mechanical steps in the [Trotta] process." Appellant

disagrees. Trotta emphasizes repeatedly that his blade is "simple to manufacture and may be produced economically," and that his method "lends itself well to mass production techniques and is therefore inexpensive and readily adapted to the manufacture of a discardable razor." (See, e.g., Trotta, col. 1, lines 42-48 and 53-56, and col. 3, lines 56-60.) In view of this teaching, the artisan would have believed the Trotta process to be economical, and seen no reason to attempt to simplify it.

Even if the artisan had been looking to improve upon Trotta's manufacturing method, the artisan would not have looked to Erdmann. As discussed above, the "shearing blades" described by Erdmann are intended for use in electric shavers, and as a result the cutting edges 12 of Erdmann's blades are recessed from the surface, at the bottom of each aperture. The artisan would not have expected Erdmann's etching method to provide the sharp cutting edges, at the surface plane, that are required by Trotta's wet shaving application and that are obtained by his grinding/sharpening operation.

In the Office Action mailed October 19, 2005, the Examiner states that "it is believed that the process in Erdmann can be used to create a surface plane with cutting edges at the surface plane in Trotta because the wafer in Trotta can uniformly be etched away in order to create a planar wafer similar to the section on the right of figure 1c) in Erdmann." Figure 1c), reproduced below, is merely a perspective view of the shearing blade shown in figure 1b), and thus, like figure 1b), shows only cutting edges that are recessed below the surface plane. Even if the Erdmann process *could* be used to form a sharp cutting edge at the surface plane, there is simply no suggestion in either reference to do so, and thus it would appear that the Examiner is employing the improper hindsight "obvious to try" standard. Furthermore, Erdmann provides no suggestion that an etching process could produce the angled honeycomb structure of Trotta, particularly the acutely angled cutting blades 30 shown in Figure 4.



The Examiner has suggested a new motivation to combine Trotta and Erdmann in the Examiner's Answer at page 5, lines 9-11. The Examiner asserts that the teachings of Erdmann and Trotta are combinable "because both Erdmann and Trotta disclose devices which have cutting edges for cutting hair from a user's skin." Applicants respectfully disagree. While both the dry shaver (including the shaving foil and the underlying shearing knives) of Erdmann and the wet shaving razor blade of Trotta cut hair, there the resemblance ends. The two devices operate very differently, and cut hair using a different cutting mechanism. (Declaration of Uwe Sievers.)

In Erdmann, the "shearing blade" (which would more properly be translated from the German as "shearing foil") does not in itself cut hair. It is instead the shearing interaction between the edge 12 of this foil and the edges of underlying shearing knives (referred to collectively as an undercutter) that cuts the hair, in much the same manner as the interaction of the two opposing blades of a pair of scissors. Like scissor blades, the shearing foil and shearing knives do not need to have sharp cutting edges, as it is their interaction that creates the requisite shearing force. (Id.) Contrary to the Examiner's assertion, replacing a wet shaving razor blade with one scissor blade would not necessarily cut hair from a user's face. (See Office Action dated October 11, 2006, page 5, lines 4-6.) Furthermore, replacing the blades of Trotta with the shearing foil of Erdmann would drastically alter the structure of the Trotta by rendering the cutting elements non-acute.

As set forth in the Declaration of Uwe Sievers, the shaving foil of Erdmann and the razor blade of Trotta have different types of edges, intended for different purposes and having different positioning and characteristics. The Examiner's statement that hair roots provide an opposing force to a wet shaving blade as it glides over the skin, while true, is irrelevant. While both shaving processes necessarily have opposing forces, the difference between what is providing the opposing force differentiates the shaving foil of Erdmann from the razor blade of Trotta. The razor blade of Trotta must be adapted to closely interact with a user's skin, while a shaving foil of Erdmann must be adapted to allow for repeated interaction with an underlying shearing knife. Interaction with a user's skin requires greater sharpness for adequate shearing performance. Therefore, it would not have been obvious to one of skill in the shaving art to combine the teachings of these references because an artisan would not have had a reasonable expectation that

the Erdmann etching process would provide adequate sharpness of the cutting edge for use in Trotta's wet shaving blade.

At page 4, lines 17-22 of the Examiner's Answer dated June 22, 2006, the Examiner acknowledges that Erdmann's "cutting edge" 12 is not positioned at the surface plane of Erdmann's blade, but dismisses this distinction as being unimportant. Appellant disagrees. Because of this difference, even if the person of skill in the art had combined the teachings of these references, the claimed invention would not have been reached. Erdmann does not teach or suggest using etching to form an edge at the surface plane of a cutting element, nor does he disclose how etching would be used in this manner. Thus, to obtain Appellant's claimed cutting element, the artisan would not only have had to recognize that Erdmann's etching process would be suitable to form Trotta's wet shaving blade, but also would have had to modify Erdmann's etching process so as to reposition the edge 12 at the surface plane. (Declaration of Uwe Sievers, paragraph 4.) Such wholesale modification would require the exercise of impermissible hindsight.

Moreover, neither Trotta nor Erdmann describes or suggests the second step in claim 17, i.e., "selectively removing crystal material at the surface by employing an etching process to form a planar cutting element inclined at an acute angle to the surface plane and having a sharp cutting edge substantially at the surface plane." There is simply no recognition in *either reference* that etching may be used to form a blade for wet shaving, having a sharp cutting edge at the surface plane. It was the *Applicants* themselves who made this discovery. As the Federal Circuit has repeatedly discussed, in decisions such as Fritch and W.L. Gore, an inventor's own teachings cannot be used against the inventor when conducting a 35 U.S.C. § 103(a) analysis.

Thus, for the above reasons, the 35 U.S.C. § 103(a) rejection of claim 17 based on the combination of Trotta and Erdmann should be reversed.

B. Claims 19 and 23 are not obvious under 35 U.S.C. § 103(a) over Trotta in view of Erdmann in further view of APA

The 35 U.S.C. § 103(a) rejections of the remaining claims over Trotta in view of Erdmann and Trotta in view of Erdmann and APA should be reversed for the same reasons. It is respectfully submitted that claims 18-12 and 26 are patentable for at least the reasons discussed above.

C. *Claims 17-24 and 26 are not obvious under 35 U.S.C. § 103(a) over Trotta in view of Marcus*

As discussed above, Trotta describes a method of making a blade that includes extruding a honeycomb-shaped uncured ceramic block and then slicing the block at an angle A to create the general blade shape, as shown in Figs. 2 and 4 above. The sliced block is then cured and the surface of the cured ceramic is ground and polished to form sharpened cutting edges 30. As also discussed above, Trotta does not teach or suggest several features of Appellant's claim 17.

In a second attempt to remedy the deficiencies of Trotta, the Examiner relies upon Marcus, which discloses a method of making knife blades. Marcus discloses a process of making sharp cutting edges from wafers of monocyrstalline silicon using masks and a series of etching steps. Marcus, however, does not disclose formation of a cutting ede substantially at the surface plane, as recited in Appellant's claims. Instead, Marcus only discloses methods of producing cutting edges perpendicular or parallel to the surface of the monocyrstalline silicon wafer.

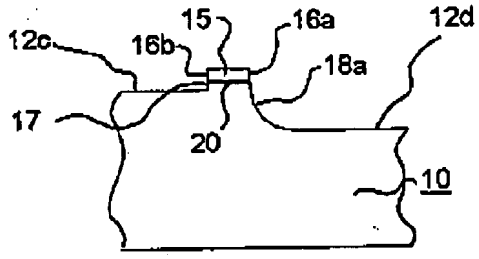


Fig. 8

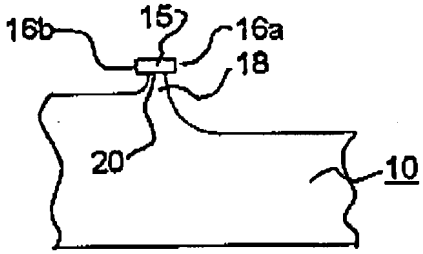


Fig. 9

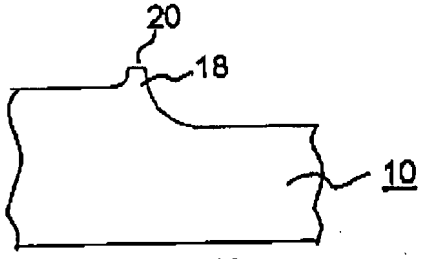


Fig. 10

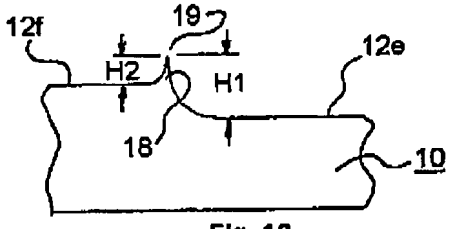


Fig. 12

As shown in Figs. 8-10 and 12 above, Marcus discloses the creation of a cutting edge that is perpendicular to the wafer surface. Marcus discloses the placement of a mask 15 along a ridge 20 (Fig. 8) followed by isotropic etching to narrow with width of the ridge 20 (Fig. 9), then the stripping of the mask 15 (Fig. 10), followed by the sharpening of the ridge 20 by an oxide forming and oxide stripping process to result in the pointed ridge 18 after an oxide layer from the final oxidizing-sharpening process has been removed. Marcus notes that the perpendicular blade surface may have utility in microtome instruments (Marcus, col. 7, lines 13-15) or where a knife blade needs "to be inserted to a chosen depth but not beyond." (Marcus, col. 7, lines 44-45.)

As show in Figs. 29-31 and 33 below, Marcus also discloses a cutting edge that extends generally "'horizontally' in the plane of the wafer flat surface." (Marcus, col. 8, lines 59-65.) To create a horizontal cutting edge, a silicon wafer 50 is provided with a silicon dioxide layer 62 completely covering the bottom surface of the wafer, a masking layer 56, a top oxide layer 60, a second layer of silicon carbide or boron nitride 68, and a stiffening layer 69. The upper layers 68 and 69 are patterned to provide a capping mask 70 overlying only the only a semicircular portion of the underlying first etchant mask 56 (Fig. 29). (Marcus, col. 9, lines 23-43.)

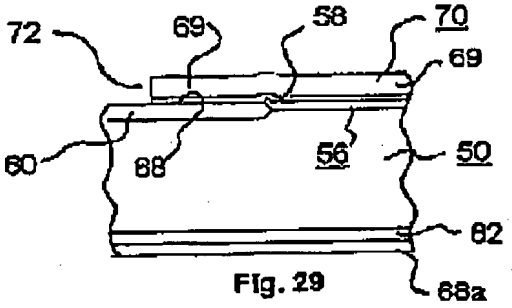


Fig. 29

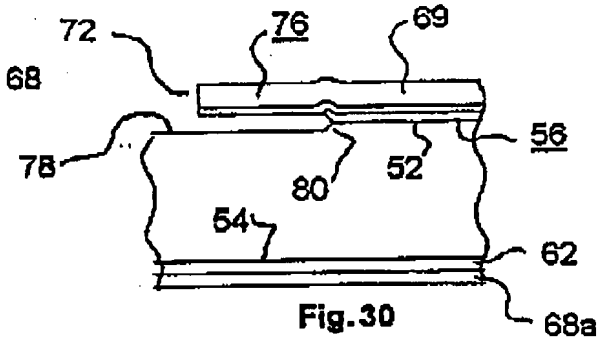


Fig. 30

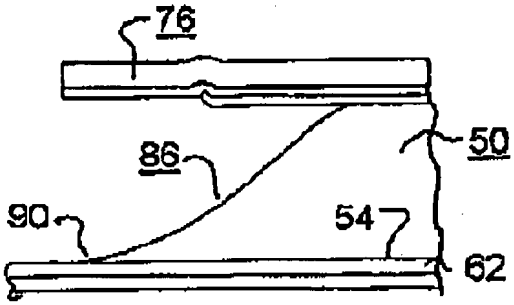


Fig. 31

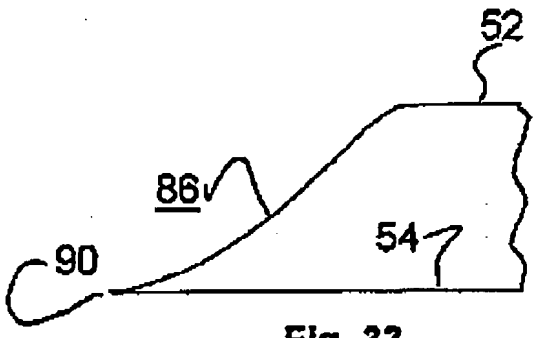


Fig. 33

A silicon oxide etchant, e.g., HF, is then used to remove the oxide layer underlying the layers 68 and 69 to produce the structure shown in Fig. 30. The ledge 76 of silicon carbide or boron nitride covered with the stiffening layer 69 is left extending over and spaced from a newly exposed surface 78 of the silicon wafer. The original silicon surface 78 underlying the ledge 76 along with all other exposed silicon surfaces are then isotropically etched through the wafer to produce the structure shown in Fig. 31. All of the masking layers are then removed from all surfaces and the structure is oxidation sharpened to produce the edge 90 shown in Fig. 33. (Marcus, col. 9, line 41 – col. 10, line 43.) As is the case in Erdmann, this edge is below and parallel to the surface plane.

Claim 17 will again be treated as representative of the claims on appeal. The rejection of claim 17 under 35 U.S.C. § 103(a) based on the combination of Trotta and Marcus should be reversed. The rejection is again a classic improper hindsight reconstruction of the claimed invention from the prior art.

Neither Trotta nor Marcus, alone or in combination, would motivate a person of ordinary skill in the art to replace the process described by Trotta with the etching process taught by Marcus. The Examiner asserts that the artisan would have been motivated to make this modification "to make a cutting element from a wafer of single crystal material in Marcus . . . in order to achieve an exceptionally sharp edge."[1] Appellant specifically disagrees.

The artisan would not have been motivated to combine the disparate teachings of these references. Trotta discloses a honeycombed structure having blades at acute angles to the blade unit surface, while Marcus discloses a method for producing knife edges that are either perpendicular or parallel to the structure's surface. Trotta discloses an extruded ceramic material while Marcus discloses a monocyrstalline silicon. For an artisan to arrive at the proposed combination, that artisan would have had to recognize a need to replace both the material and the manufacturing method of Trotta with a completely different material and manufacturing method.

Moreover, as discussed above, Trotta repeatedly emphasizes that his blade is "simple to manufacture and may be produced economically," and that his method "lends itself well to mass

[1] Applicants note that the Examiner includes the phrase "as taught by Erdmann" in this motivation even though Erdmann is not a part of this particular rejection. Applicants thus interpret this language as merely a typographical error on the part of the Examiner.

production techniques and is therefore inexpensive and readily adapted to the manufacture of a discardable razor." (See, e.g., Trotta, col. 1, lines 42-48 and 53-56, and col. 3, lines 56-60.) In view of this teaching, the artisan would have believed the Trotta process to be economical, and seen no reason to attempt to modify it in any manner, much less with the proposed wholesale reconstruction.

Even if one having ordinary skill in the art were motivated to find alternative materials and methods to produce the structure of Trotta, one having ordinary skill in the art at the time of invention would not have a reasonable expectation of success in arriving at the structure of Trotta by the method of Marcus. The honeycombed structure of the blade of Trotta has blades formed at an acute angle to the front and rear surfaces of the blade unit block. (See Trotta, col. 3, lines 14-18.) The blade embodiments disclosed by Marcus, however, are not honeycombed, do not provide for acutely angled cutting blades, and do not provide for cutting blades with planer blade surfaces, which are all features required by Trotta's wet shaving application and that are obtained by Trotta's extruding, angled cutting, and grinding/sharpening operations. Given these differences in structure, one having ordinary skill in the art at the time of invention would not have expected the method of Marcus to be capable of producing the angled and honeycombed structure of Trotta.

Furthermore, the Marcus process relies upon isotropic etching of the wafer surface, which removes material in all directions. As shown in the figures of Marcus, the use of isotropic etching with masking layers causes material to be removed along the edges of a mask layer. This partial removal of material from beneath the mask layer is the principle upon which the sharp knife edges of Marcus are produced. Marcus does not disclose or even suggest that this etching process could be used to create a honeycombed structure having angled and planer cutting elements as disclosed by Trotta. Even if the Marcus process *could* be used to form honeycombed and angled cutting blade of Trotta, there is simply no reasonable expectation of success, let alone any actual suggestion to combine the references.

Moreover, neither Trotta nor Marcus describes or suggests the second step in Appellant's claim 17, i.e., "selectively removing crystal material at the surface by employing an etching process to form a planar cutting element inclined at an acute angle to the surface plane and having a sharp cutting edge substantially at the surface plane." There is simply no recognition in

Claims Appendix

17. A method of making a cutting element for a safety razor blade unit comprising the steps of providing a wafer of single crystal material having a surface lying in a predetermined plane of the crystallographic structure, selectively removing crystal material at the surface by employing an etching process to form a planar cutting element inclined at an acute angle to the surface plane and having a sharp cutting edge substantially at the surface plane, and forming a guard element from the wafer of single crystal material by the etching process, said guard element being disposed substantially parallel to the cutting edge and spaced forwardly therefrom and being integrally connected to the cutting element by interconnecting elements.

18. A method according to claim 17, wherein the etching process comprises anisotropic wet chemical etching.

19. A method according to claim 17, wherein the etching process includes dry etching.

20. A method according to claim 17, wherein during the etching process a plurality of planar cutting elements inclined at an acute angle to the surface plane and having a sharp edge substantially at the surface plane are formed.

21. A method according to claim 20, wherein the plurality of planar cutting elements comprises three planar cutting elements.

22. A method according to claim 17, wherein the single crystal material is silicon.

23. A method according to claim 17, wherein the etching process comprises isotropic etching.

24. A method according to claim 17, wherein the etching process comprises wet etching.

26. A method according to claim 17, further comprising providing at least one intermediate transverse element connecting the cutting element and the guard element between the interconnecting elements during the etching process.

Evidence Appendix

Declaration of Uwe Sievers, filed July 2, 2006. The Examiner considered this declaration in the Office Action dated 10/11/2006. page 4.

Related Proceedings Appendix

None.